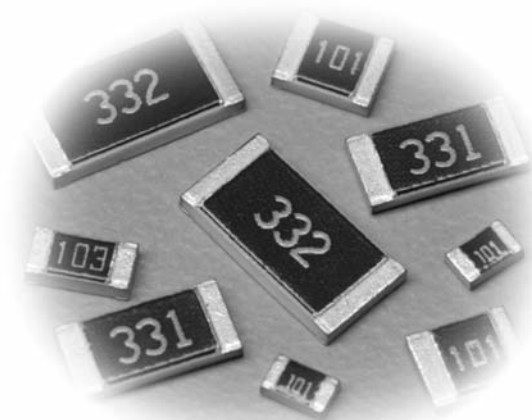
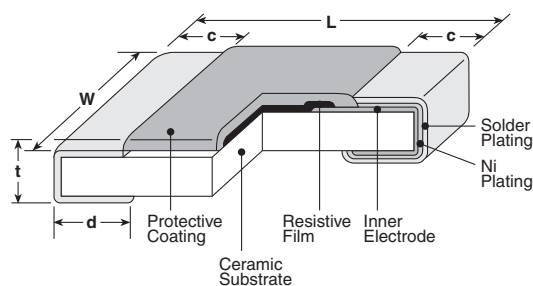


### features

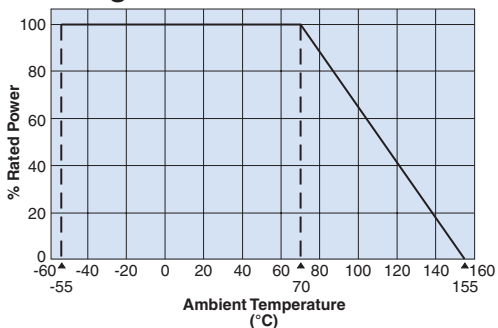
- Excellent anti-sulfuration characteristic due to using high sulfuration-proof inner top electrode material
- Superior to RK73 series chip resistors in pulse withstanding voltage
- Suitable for both flow and reflow soldering
- Marking: White three-digit on wine red protective coat
- Products with lead-free terminations meet EU RoHS requirements. Pb located in glass material, electrode and resistor element is exempt per Annex 1, exemption 5 of EU directive 2005/95/EC



### dimensions and construction



### Derating Curve



Type (Inch Size Code)	Dimensions inches (mm)				
	L	W	c	d	t
<b>1J</b> (0603)	.063±.008 (1.6±0.2)	.031±.004 (0.8±0.1)	.012±.004 (0.3±0.1)	.012±.004 (0.3±0.1)	.018±.004 (0.45±0.1)
<b>2A</b> (0805)	.079±.008 (2.0±0.2)	.049±.004 (1.25±0.1)	.016±.008 (0.4±0.2)	.012 <sup>+0.008</sup> <sub>-.004</sub> (0.3 <sup>+0.2</sup> <sub>-.1</sub> )	.02±.004 (0.5±0.1)
<b>2B</b> (1206)	.126±.008 (3.2±0.2)	.063±.008 (1.6±0.2)	.02±.012 (0.5±0.3)	.016 <sup>+0.008</sup> <sub>-.004</sub> (0.4 <sup>+0.2</sup> <sub>-.1</sub> )	.024±.004 (0.6±0.1)
<b>2E</b> (1210)		.102±.008 (2.6±0.2)			
<b>W2H</b> (2010)	.197±.008 (5.0±0.2)	.098±.008 (2.5±0.2)		.026±.006 (0.65±0.15)	
<b>W3A</b> (2512)	.248±.008 (6.3±0.2)	.122±.008 (3.1±0.2)			

### ordering information

New Part #	SG73	2A	RT	TD	103	K
Type	SG73	Power Rating	Termination Material	Packaging	Nominal Resistance	Resistance Tolerance
		1J 2A 2B 2E W2H W3A	RT: Sn Anti-Sulfur	TP: 0603, 0805: 7" 2mm pitch punch paper TD: 0603, 0805, 1206, 1210: 7" 2mm pitch punched paper TDD: 0603, 0805, 1206, 1210: 10" paper tape TE: 0805, 1206, 1210, 2010 & 2512: 7" punched plastic TED: 0805, 1206, 1210, 2010 & 2512: 10" punched plastic For further information on packaging, please refer to Appendix A	±10%, ±20%: 2 significant figures + 1 multiplier "R" indicates decimal on value <10Ω	K: ±10% M: ±20%

Specifications given herein may be changed at any time without prior notice. Please confirm technical specifications before you order and/or use.

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## applications and ratings

Part Designation	Power Rating	T.C.R. (ppm/°C) Max.	Resistance Range		Maximum Working Voltage	Maximum Overload Voltage	Rated Ambient Temperature	Operating Temperature Range
			(E-12) (K±10%)	(E-12) (M±20%)				
1J (0603)	0.1W	±400	1Ω - 8.2Ω		50V	100V	+70°C	-55°C to +155°C
		±200	10Ω - 1MΩ					
2A (0805)	0.125W	±400	1Ω - 8.2Ω		150V	200V		
		±200	10Ω - 1MΩ					
2B (1206)	0.25W	±400	1Ω - 8.2Ω		200V	400V		
		±200	10Ω - 1MΩ					
2E (1210)	0.33W	±400	1Ω - 8.2Ω					
		±200	10Ω - 1MΩ					
W2H (2010)	0.75W	±400	1Ω - 8.2Ω					
		±200	10Ω - 1MΩ					
W3A (2512)	1W	±400	1Ω - 8.2Ω					
		±200	10Ω - 1MΩ					

## environmental applications

### Performance Characteristics

Parameter	Requirement Δ R		Test Method
	Limit	Typical	
Resistance	Within specified tolerance	—	25°C
T.C.R.	Within specified T.C.R.	—	+25°C/-55°C and +25°C/+125°C
Overload (Short time)	±2%	±0.5%	Rated Voltage x 2.5 for 5 seconds
Resistance to Solder Heat	±1%	±0.75%	260°C ± 5°C, 10 seconds ± 1 second
Rapid Change of Temperature	±0.5%	±0.3%	-55°C (30 minutes), +125°C (30 minutes), 100 cycles
Moisture Resistance	±3%	±0.75%	40°C ± 2°C, 90%~95%RH, 1000 hours; 1.5 hr ON, 0.5 hr OFF cycle
Endurance at 70°C	±3%	±0.75%	70°C ± 2°C, 1000 hours, 1.5 hr ON, 0.5 hr OFF cycle
High Temperature Exposure	±1%	±0.5%	+155°C, 1000 hours
Sulfuration Test	—	±0.5%	H <sub>2</sub> S 1000ppm, +25°C, 90%Rh, 720 hours

Additional environmental applications can also be found at [www.koaspeer.com](http://www.koaspeer.com)

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